



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/510,651	02/22/2000	Klaus Doelle	VOI0148.US	1552

7590

06/15/2005

Todd T Taylor
Taylor & Aust P C
142 S Main Street
P O Box 560
Avilla, IN 46710

EXAMINER

SMITH, JEFFREY A

ART UNIT

PAPER NUMBER

3625

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/510,651

Applicant(s)

DOELLE ET AL.

Examiner

Jeffrey A. Smith

Art Unit

3625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-16 and 19 is/are allowed.
- 6) ☒ Claim(s) 17 and 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 February 2000 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 3625

DETAILED ACTION

Response to Amendment

The response filed March 21, 2005 has been entered and considered.

Claims 1-19 are pending.

Claims 1, 3, 8, 10-13, 17, and 19 have been amended.

An action on the merits follows.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reid et al. ("Reid": U.S. Patent No. 6,298,308 B1) in view of Galasso, Jay: "Business goals, end-users must drive information systems selection", Pulp & Paper,

Art Unit: 3625

San Francisco, Nov. 1998, Vol. 72, Iss. 11; pg. 50 ("Galasso")
and Bjornson (U.S. Patent No. 6,505,145 B1).

The Reid System

Reid discloses a monitoring system comprising an apparatus (14); a sensor (18) coupled with said apparatus and configured for sensing a physical parameter associated with said apparatus (col. 5, lines 14-15), said sensor including a wireless transmitter for transmitting an air-borne wireless output signal corresponding to said sensed physical parameter (col. 5, lines 32-39); a remote unit (16) including a receiver for receiving said wireless output signal, said receiver including a first data link for transmitting a remote output signal corresponding to said wireless output signal (col. 6, lines 30-40); and a base unit (34) including a second data link at least intermittently coupled with said first data link for receiving said remote output signal (col. 7, lines 23-34), said base unit including means for analyzing said remote output signal (col. 7, lines 34-38) and means for transmitting a state notification to said remote unit via said second data link and said first data link corresponding to a state of said sensed physical parameter (col. 10, lines 59-62).

Art Unit: 3625

Reid discloses that said apparatus includes a wear part, and wherein said wireless output signal corresponds to a wear state of said wear part (col. 5, lines 14-15).

Reid discloses that said first data link and said second data link each comprise a modem (col. 6, lines 30-40; and col. 7, lines 23-34).

The Reid Method

Reid discloses a method of monitoring a system comprising the steps of providing an apparatus; coupling a sensor with said apparatus; sensing a physical parameter associated with said apparatus; transmitting an air-borne wireless output signal using a wireless transmitter, said wireless output signal corresponding to said sensed physical parameter; receiving said wireless output signal at a receiver of a remote unit; transmitting a remote output signal from a first data link of said remote unit to a second data link of a base unit; analyzing said remote output signal; and transmitting a state notification via said second data link and said first data link corresponding to a state of said sensed physical parameter. See "Summary of the Invention".

Particularly regarding claim 17, Reid further discloses a method of monitoring a physical parameter of a wear part in a

Art Unit: 3625

system. The method comprises: positioning a sensor in association with the wear part; sensing a physical parameter associated with the wear part; transmitting an air-borne wireless output signal using a wireless transmitter, said wireless output signal corresponding to said sensed physical parameter; receiving said wireless output signal at a receiver of a remote unit; transmitting a remote output signal from a first data link of said remote unit to a second data link of a base unit; analyzing said remote output signal; and transmitting a state notification corresponding to a state of said sensed physical parameter. See "Summary of the Invention".

Reid discloses that said analyzing step is carried out in said base unit (col. 7, lines 34-35).

Reid discloses that said analyzing step is carried out in said remote unit (col. 7, lines 34-35).

Reid discloses that said step of transmitting said state notification comprises transmitting said state notification to said remote unit from said base unit (col. 10, lines 59-62).

Reid discloses that said first data link and said second data link each comprise a modem and said step of transmitting said remote output signal is carried out intermittently (col. 6, lines 30-40; and col. 7, line 23-34; and col. 12, lines 63-66).

Art Unit: 3625

Reid discloses that said analyzing step is carried out after said step of transmitting said remote output signal (col. 9, lines 9-15).

Reid does not disclose:

Claims 17: "[a] method of monitoring a physical parameter of a wear part in a system for one of making and processing a fiber suspension".

Claim 18: "wherein said system comprises one of a stock preparation system and a paper-making machine".

Reid, however, does teach that their invention "relates generally to predictive maintenance, and more particularly to a diagnostic network and method which employs local experts to automatically monitor, diagnose and take action in connection with different machines included within a system" (col. 1, lines 14-18). Reid further teaches:

"The site 12 may be an office building, manufacturing facility, power plant, etc., or basically any location(s) having one or more machines which are to be monitored for predictive maintenance. Such machines may be engines, turbines, compressors, generators, motors, or any other type of machine for which predictive maintenance is useful. The site 12, as exemplified in FIG. 1, includes a plurality of machines 14." (col. 4, lines 53-59; emphasis added)

Art Unit: 3625

The Galasso Teaching

Now comes Galasso. Galasso reports that "modern [paper] millwide systems can provide end-to-end solutions from stock preparation to shipping" (page 3, second to last paragraph: emphasis added). Galasso discusses an example of maintenance management in a paper mill environment (beginning at page 4):

"EXAMPLE: MAINTENANCE MANAGEMENT.

Computerized maintenance management systems (CMMS) are one of the specialized application markets that have grown rapidly. Using this area as an example highlights the kinds of trade-offs involved in purchasing applications today, and can offer some insight into the solution.

Justifying a maintenance system. The business case for updating to a modern maintenance system can be made on several levels. Mills may have had their own 'home grown' solutions, and the cost of adding features or addressing Year 2000 compliance may be too expensive to continue with the existing system. A modern CMMS can offer improved visibility of spare parts inventories, enabling several departments or mills to share expensive equipment.

An even more compelling argument is to increase the reliability of the mill operating equipment through the use of proactive maintenance strategies. This can involve integrating real-time information from control systems for preventive and predictive maintenance. Scheduling can be done based on actual equipment usage and calendar time, as opposed to calendar time alone. Predictive strategies involve more advanced techniques using analysis of vibration or other diagnostic measurements to predict when equipment will fail. The result is reductions in unplanned downtime through a more productive, less costly maintenance program." (emphasis added).

Art Unit: 3625

It would have been obvious to one of ordinary skill in the art to have applied the monitoring system and methods of Reid in an environment of the type reported by Galasso (i.e. a paper mill environment comprising stock preparation apparatus and paper-making machines) and for the purpose of monitoring such stock preparation apparatus or for monitoring a physical parameter of a wear part in a system for one of making and processing a fiber suspension (such as those well-known in a paper mill environment). The skilled artisan would have recognized both the advantages reported by Galasso in using predictive maintenance in order to have reduced unplanned downtime through a more productive, less costly maintenance program than previously realized (page 5, lines 1-5), as well as the teaching of Reid of the wide range of environments in which their invention may offer service (col. 2, lines 45-53).

The combination of Reid and Galasso does not provide: at least one of: transmitting a price quote; and transmitting a shipment notification.

The Bjornson Teaching

Now comes Bjornson. Bjornson teaches, in a method similar to that of the combined teaching of Reid and Galasso, that a

Art Unit: 3625

method of monitoring a physical parameter of a wear part in a system may comprise a step of transmitting a price quote for the purposes of repairing or replacing a wear part (col. 6, line 56-col. 7, line 8).

It would have been obvious to one of ordinary skill in the art to have provided the combined method of Reid and Galasso to have included the step of at least transmitting a price quote in order to undertake corrective action of the wear part in the system (col. 7, lines 6-8). The Bjornson method is particularly advantageous in that it offers a degree of automation which allows even a non-specialist to undertake corrective actions (see col. 3, lines 58-67).

Allowable Subject Matter

Claims 1-16, and 19 are allowable over the prior art of record.

Response to Arguments

Applicant's arguments with respect to claims 17 and 18 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

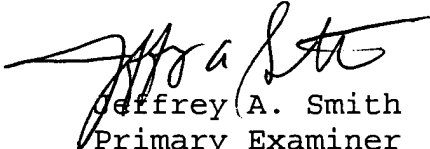
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey A. Smith whose telephone number is (571) 272-6763. The examiner can normally be reached on M-F 6:30am-6:00pm.

Art Unit: 3625

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wynn Coggins can be reached on (571) 272-7159. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jeffrey A. Smith
Primary Examiner
Art Unit 3625

jas